

Experiment Number: **A67784**

Test Type: **Genetic Toxicology - Bacterial
Mutagenicity**

G06: Ames Summary Data

Test Compound: **Linalool**

CAS Number: **78-70-6**

Date Report Requested: **09/17/2018**

Time Report Requested: **14:11:46**

NTP Study Number:

A67784

Study Result:

Negative

Experiment Number: A67784

G06: Ames Summary Data

Date Report Requested: 09/17/2018

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

Test Compound: Linalool

Time Report Requested: 14:11:46

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	117 ± 6.6	113 ± 4.1	132 ± 12.5	125 ± 4.2	123 ± 9.9
3.0	114 ± 3.3	120 ± 1.0			
10.0	105 ± 5.1	139 ± 5.9	145 ± 3.2	128 ± 1.3	122 ± 3.5
33.0	101 ± 10.8	130 ± 4.5	121 ± 5.4	124 ± 3.2	115 ± 5.2
100.0	103 ± 8.5	115 ± 5.4	133 ± 13.9	123 ± 3.2	119 ± 7.0
333.0	53 ± 2.9 ^s	95 ± 4.2 ^s	120 ± 2.3	119 ± 7.6	139 ± 18.0
1000.0			82 ± 5.8 ^s	41 ± 3.3 ^s	78 ± 3.6 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					650 ± 30.6
Positive Control ³		930 ± 17.2			
Positive Control ⁴			629 ± 9.9		
Positive Control ⁵				568 ± 17.6	
Positive Control ⁶	843 ± 13.0				

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Test Compound: Linalool
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Date Report Requested: 09/17/2018
Time Report Requested: 14:11:46

Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	112 ± 5.0
3.0	
10.0	106 ± 0.9
33.0	111 ± 6.3
100.0	107 ± 5.8
333.0	109 ± 7.4
1000.0	35 ± 3.2 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	644 ± 18.9
Positive Control ⁵	
Positive Control ⁶	

Experiment Number: A67784

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Date Report Requested: 09/17/2018

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CAS Number: 78-70-6

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	25 ± 1.5	18 ± 1.8	16 ± 4.9	21 ± 2.8	24 ± 3.2
3.0	22 ± 5.0	18 ± 5.4			
10.0	18 ± 1.8	17 ± 3.6	13 ± 1.0	22 ± 3.3	19 ± 0.0
33.0	20 ± 1.9	20 ± 0.7	12 ± 0.3	19 ± 3.3	15 ± 0.7
100.0	21 ± 2.0	20 ± 3.0	19 ± 1.5	25 ± 0.7	15 ± 3.2
333.0	8 ± 1.2 ^s	9 ± 0.7 ^s	13 ± 1.5	24 ± 4.1	18 ± 3.8
1000.0			9 ± 0.9 ^s	9 ± 0.9 ^s	9 ± 0.9 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					126 ± 8.0
Positive Control ⁶	865 ± 17.3	961 ± 23.6			
Positive Control ⁵			107 ± 18.2		
Positive Control ⁷				106 ± 5.2	

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Test Compound: Linalool
CAS Number: 78-70-6

Date Report Requested: 09/17/2018
Time Report Requested: 14:11:46

Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	21 ± 2.8
3.0	
10.0	22 ± 3.3
33.0	19 ± 3.3
100.0	25 ± 0.7
333.0	24 ± 4.1
1000.0	9 ± 0.9 ^s
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	
Positive Control ⁵	120 ± 10.5
Positive Control ⁷	

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 CAS Number: 78-70-6

Date Report Requested: 09/17/2018
 Time Report Requested: 14:11:46

Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	157 ± 16.8	144 ± 14.3	179 ± 10.5	174 ± 7.6	168 ± 14.3
3.0	139 ± 9.4	141 ± 9.3			
10.0	163 ± 6.0	162 ± 12.2	161 ± 13.6	185 ± 0.3	190 ± 3.2
33.0	164 ± 11.5	153 ± 5.0	181 ± 8.2	151 ± 3.0	176 ± 8.8
100.0	143 ± 8.7	148 ± 18.0	160 ± 7.8	160 ± 11.5	165 ± 17.2
333.0	111 ± 5.4 ^s	107 ± 6.7 ^s	161 ± 18.0	168 ± 8.3	156 ± 9.6
1000.0			98 ± 10.1 ^s	102 ± 6.7 ^s	95 ± 13.5 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					624 ± 27.2
Positive Control ⁴			548 ± 16.5		
Positive Control ⁵				686 ± 21.0	
Positive Control ⁸	665 ± 15.9	576 ± 28.0			

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Date Report Requested: 09/17/2018
Time Report Requested: 14:11:46

Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	167 ± 15.0
3.0	
10.0	141 ± 8.8
33.0	151 ± 3.3
100.0	134 ± 11.4
333.0	153 ± 17.1
1000.0	103 ± 8.7 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ⁴	748 ± 13.9
Positive Control ⁵	
Positive Control ⁸	

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Date Report Requested: 09/17/2018
 Time Report Requested: 14:11:46

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	16 ± 2.6	25 ± 3.2	18 ± 1.7	28 ± 3.7	29 ± 5.3
3.0	10 ± 1.5	21 ± 1.7			
10.0	10 ± 0.9	25 ± 5.7	18 ± 1.0	22 ± 3.0	19 ± 0.0
33.0	19 ± 3.2	14 ± 2.3	13 ± 1.2	23 ± 1.0	16 ± 1.2
100.0	17 ± 1.5	12 ± 1.3	15 ± 2.0	18 ± 2.9	16 ± 2.5
333.0	10 ± 0.9 ^s	8 ± 0.9 ^s	18 ± 2.8	25 ± 4.6	17 ± 4.7
1000.0			7 ± 1.5 ^s	9 ± 0.9 ^s	8 ± 0.9 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					655 ± 23.7
Positive Control ⁴			563 ± 16.8		
Positive Control ⁹	424 ± 6.4	451 ± 17.8			
Positive Control ⁵				541 ± 18.0	

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G06: Ames Summary Data
Test Compound: Linalool
CAS Number: 78-70-6

Date Report Requested: 09/17/2018
Time Report Requested: 14:11:46

Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	25 ± 3.5
3.0	
10.0	23 ± 3.1
33.0	15 ± 2.6
100.0	21 ± 2.0
333.0	26 ± 5.0
1000.0	9 ± 1.0 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ⁴	576 ± 9.1
Positive Control ⁹	
Positive Control ⁵	

Experiment Number: A67784

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Date Report Requested: 09/17/2018

Test Type: Genetic Toxicology - Bacterial
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Time Report Requested: 14:11:46

Strain: TA102

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	208 ± 5.4	247 ± 16.9	314 ± 11.1	239 ± 32.4	287 ± 19.9
3.0	224 ± 26.5	243 ± 12.8	288 ± 24.8		270 ± 15.4
10.0	192 ± 14.4	258 ± 7.0	298 ± 6.7	251 ± 20.9	232 ± 9.7
33.0	194 ± 10.9	262 ± 12.8	290 ± 5.9	239 ± 26.1	241 ± 18.6
100.0	205 ± 5.9	265 ± 10.8	295 ± 24.1	247 ± 4.7	286 ± 0.9
333.0	85 ± 4.7 ^s	62 ± 8.7 ^s	162 ± 28.3	242 ± 13.9	139 ± 29.9
1000.0				60 ± 9.0 ^s	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ¹⁰	891 ± 37.4	800 ± 43.1			
Positive Control ⁷			1220 ± 13.7	1013 ± 56.9	1234 ± 31.4

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Date Report Requested: 09/17/2018

Time Report Requested: 14:11:46

Strain: TA102

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	241 ± 12.8
3.0	
10.0	224 ± 8.8
33.0	213 ± 20.0
100.0	257 ± 3.2
333.0	249 ± 8.1
1000.0	88 ± 27.1 ^s
Trial Summary	Negative
Positive Control ¹⁰	
Positive Control ⁷	1105 ± 31.1

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Date Report Requested: 09/17/2018
Time Report Requested: 14:11:46

Strain: TA104

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	192 ± 15.2	305 ± 25.5	397 ± 6.8	326 ± 7.8	326 ± 33.8
3.0	205 ± 16.4	309 ± 24.2	389 ± 6.8		392 ± 9.8
10.0	170 ± 9.4	316 ± 4.3	336 ± 15.9	289 ± 15.4	371 ± 26.8
33.0	179 ± 4.1	325 ± 10.3	331 ± 6.8	313 ± 2.1	330 ± 25.7
100.0	161 ± 17.2	269 ± 9.7	361 ± 31.3	298 ± 8.7	368 ± 23.1
333.0	81 ± 3.2 ^s	143 ± 36.5 ^s	161 ± 31.8	284 ± 30.8	141 ± 19.7
1000.0				160 ± 27.0 ^s	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁷			1190 ± 31.0	1094 ± 37.5	1221 ± 18.0
Positive Control ¹¹	944 ± 19.1	1090 ± 73.5			

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Date Report Requested: 09/17/2018
Time Report Requested: 14:11:46

Strain: TA104

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	275 ± 6.1
3.0	
10.0	303 ± 20.7
33.0	268 ± 5.7
100.0	310 ± 7.4
333.0	251 ± 4.4
1000.0	155 ± 30.8 ^s
Trial Summary	Negative
Positive Control ⁷	1214 ± 16.8
Positive Control ¹¹	

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LEGEND

Values given as Mean or Mean \pm Standard Error Mean

The number of samples = 3, unless samples marked toxic or contaminated were excluded from mean and SEM calculations

CAS Number = Chemical Abstracts Service registry number

1: Vehicle Control: Dimethyl Sulfoxide

2: 1.0 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate Sodium Azide

4: 2.0 ug/Plate 2-Aminoanthracene

5: 5.0 ug/Plate 2-Aminoanthracene

6: 5.0 ug/Plate Sodium Azide

7: 10.0 ug/Plate 2-Aminoanthracene

8: 50.0 ug/Plate 9-Aminoacridine

9: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

10: 0.5 ug/Plate Mitomycin-C

11: 250.0 ug/Plate Methyl Methane Sulfonate

s: Slight Toxicity

** END OF REPORT **